

REMARKS

This is a full and timely response to the Office Action mailed August 11, 2008. Applicant respectfully submits the foregoing amendment and following remarks for consideration by the Examiner.

Claims 1-5, 7, 8, 11-18, 20, and 26-29 are pending in this application, with claims 1, 11, 16, and 26 being the independent claims. Claims 1, 2, 3, 16, 17, 18, 26, and 27 have been amended. Claims 6, 9, 10, 19, and 21-25 have been canceled.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 1-7, 17, 18, and 27 are rejected under 35 U.S.C. § 112, first paragraph. Particularly, the Examiner stated that the term “active” was unclear. This term has been removed, thereby rendering the rejection moot. It is respectfully submitted that all pending claims comply with 35 U.S.C. §112, first paragraph.

Rejections Under 35 U.S.C. § 102

Claims 1-7 and 16-20 are rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 5,332,070 to Davis et al. (“Davis”). Claims 6 and 19 have been canceled. The rejection of claims 1-5, 7, 16-18, and 20 is respectfully traversed.

Claim 1 has been amended with the elements of claim 6, and recites in part, “wherein the effective fluid mass of the fluid is chosen to give the apparatus a roll-off of -60dB/decade.” Independent claim 16 has been amended with the elements of claim 19 and recites similar elements.

The Examiner argues that Davis discloses a roll-off -60 dB/decade. However, Davis states that the “attenuation at 100 Hertz is about -68 dB.” (Davis, col. 4, lines 43). This -68 dB value is also shown in FIG. 1C in a transmissibility v. frequency ratio graph. However, it is respectfully submitted that “roll-off” is not the same as “attenuation” or “transmissibility.” On a chart corresponding to FIG. 1C of Davis, the roll-off would be the rate, or slope, of the transmissibility plot, not the amplitude. Although unstated in the text, Davis actually shows a roll-off (e.g., the slope of transmissibility) of about -40 dB.

For at least these reasons, claim 1 distinguishes over Davis. Claims 2-5 and 7 and claims 17, 18, and 20 respectively depend on claim 1 and claim 16. As such, these claims distinguish over Davis at least for the reasons discussed above.

Rejections under 35 U.S.C. §103

Claims 8, 11-15, and 26-30 are rejected under 35 U.S.C. §103 as being unpatentable over Davis in view of U.S. Patent No. 4,872,649 to Kawamata et al. (“Kawamata”) or U.S. Patent No. 4,811,919 to Jones (“Jones”).

Claim 8 recites “wherein the effective fluid mass is equal to the true fluid mass multiplied by an amplification factor, and wherein the true fluid mass is less than a mass of a payload coupled to the isolator and the effective mass is equal to or greater than the mass of the payload.” The Examiner acknowledges that Davis fails to disclose this element. Instead, the Examiner cites a portion of the Applicants’ disclosure, which states “[d]epending on the characteristics desired by the designer, different ratios [of effective fluid mass to payload mass] can be chosen.” (Applicants’ specification, paragraph [0035]). However, this statement is in the Detailed Description and refers to the Applicants’ invention. It is not prior art, admitted or otherwise, and can not be used in an obviousness rejection. As such, it is respectfully submitted that this rejection is improper and should be withdrawn.

The Examiner also references Kawamata and/or Jones. After reviewing Kawamata and Jones, particularly the portions cited by the Examiner, neither reference discloses the relationship between effective mass and the mass of the payload. As such, claim 8 distinguishes over any combination of Davis, Kawamata and Jones. Claims 11-15 depend on claim 8 and distinguish over the cited references at least for that reason.

Claim 26 recites:

selecting a cross sectional area of the first fluid containment chamber;

selecting a cross sectional area of the second fluid containment chamber; and

selecting a cross sectional area of the annular damping path, wherein the cross sectional areas of the first fluid containment chamber,

the second fluid containment chamber, and the annual damping path are selected such that the ratio of the cross sectional area of the first fluid containment chamber and the second fluid containment chamber to the cross sectional area of the damping path produce an effective mass of the fluid to enhance vibration damping and isolation, the effective mass of the fluid greater than the true fluid mass.

Davis clearly fails to disclose the method recited by claim 26. Particularly, Davis fails to disclose these selecting steps. In the rejection, e.g., of claim 1, the Examiner states that corresponding structural elements are “inherent” in Davis. Even if this is true, the affirmative consideration by a designer of the positively recited selecting steps is not inherent or even suggested by the apparatus of Davis.

Claim 26 further recites that the effective mass is greater than the true fluid mass. The Examiner refers to the Applicants’ disclosure as disclosing or suggesting this element. As noted above, use of the Applicants’ disclosure is improper. Moreover, neither Kawamata nor Jones discloses this element. As such, it is respectfully submitted that claim 26 distinguishes over Davis, Jones, and Kawamata. Claims 27-29 depend on claim 26 and distinguish over the cited references for at least that reason.

Conclusion

Applicant submits that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

Application No. 10/816,007
Response to Office Action dated August 11, 2008

If for some reason Applicant has not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

INGRASSIA FISHER & LORENZ

Dated: November 12, 2008

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